Medical team transports newborn from Puerto Rico by Staff Sgt. Matthew Rosine Air Force Print News

7/26/2006 - SAN ANTONIO (AFPN) -- Seth and Stephanie Parker held each other's hands and waited. As the plane touched down at 12:05 a.m. July 22 at Lackland Air Force Base, Texas, they smiled at each other and looked at their son.

Four-day-old Stuart lay across from his parents on a medical cart surrounded by doctors, nurses and medical technicians. He was the newest patient for the Extracorporeal Membrane Oxygenation, or ECMO, team that was double- and triple-checking everything to ensure he was ready for the next leg of his journey.

Shortly after his birth, doctors told the Parkers that moving Stuart from the third floor of the Hospital Auxilio Mutuo in San Juan, Puerto Rico, could be fatal. But now here he was -- being loaded off a C-17 Globemaster III onto an ambulance headed for Wilford Hall Medical Center.

"Once we landed, I knew everything was going to be alright," Stephanie said.

One hundred and six hours and 19 minutes earlier, Stuart Scott Parker was born. He was 20.5 inches long and weighed 7 pounds, 13 ounces.

His proud papa, a U.S. Coast Guard lieutenant, stared into the hazel eyes of his second child. Stuart has a 2-year-old sister, Sydney.

Everything had gone perfectly. It was a "perfect" pregnancy -- no problems at all. It was a "perfect" cesarean delivery. Stuart had even received a 9.9 out of 10 on his Apgar score, the quantitative rating test used to measure the vital signs of a newborn.

Holding his crying son for a few brief moments, he handed Stuart back to the nurses who began their usual newborn care. Stephanie, still recovering from the delivery, wasn't able to hold him yet.

About two hours later, the Parkers received the news that every family dreads after the birth of a child -- there was a serious problem.

"We were all just in shock," Mrs. Parker said. "It was all such a surprise, even to my doctor."

At first the doctors thought Stuart had pneumonia. He was moved to the neonatal intensive care unit for observation. Later that evening, the Parkers learned that Stuart's lungs were not working properly. The oxygen levels on his blood had "crashed" several times, dropping to dangerously low levels.

The baby was moved to the Hospital Auxilio Mutuo, another local hospital. There he received what the doctors called a "miracle gas" treatment. This nitrous oxide gas system stimulates the lungs to help the patient breathe on their own.

"I left that night with a great feeling," Lieutenant Parker said. "I told my wife he was showing great signs of improvement -- it looked like it was working."

But the next morning, Lieutenant Parker got an urgent call to sign the paperwork for a blood transfusion. It was then that he discovered his son had battled through a roller coaster night. His

oxygen levels plunged dramatically. Stuart had fought for nearly two hours to restore them -- only to crash again 20 to 30 minutes later.

After signing all the paperwork and not being allowed to see his son, the lieutenant, a search and rescue controller, drove to the hospital his wife was in, about five minutes away.

As he was coming up to see her, Stephanie was getting out of the shower. The phone rang. It was around 11 a.m. and Stuart was now 21 hours old.

The voice on the other end delivered the news -- the Parkers needed to come to the hospital right now to say goodbye -- their son was going to die.

"It was ultimate shock," Stephanie said.

Minutes later, still recovering from the previous day's surgery, Stephanie walked through the lobby of her son's hospital in pajamas and slippers, her hair still dripping wet from the shower she had just taken.

A small miracle awaited the stricken parents. Stuart was still in stable condition. The medical team explained how he had crashed repeatedly that morning and they thought his internal organs would shut down.

Now the family grasped for any information it could. How could they solve this? How could they make it better?

Stuart's hospital, while one of the best facilities in Puerto Rico, couldn't provide him with the care he needed. The doctor said the next step for Stuart would be ECMO.

The ECMO machine provides partial heart-lung bypass to infants and children suffering from severe cardiopulmonary failure. It is made to do the work of the heart and lungs -- to oxygenate the blood. This procedure is accomplished by surgery on the baby's throat that takes blood from the patient to a "lung" where it is filled with oxygen and then returned to the patient.

"ECMO is not a cure," said Maj. Melissa Tyree, ECMO director and staff neonatologist at Wilford Hall. "It buys the patient time -- time to help a disease process that can be reversed."

Since it was created in 1985, Wilford Hall's ECMO team has treated 172 patients; 63 required transport on the ECMO system. According to Wilford Hall officials, less than 20 percent of patients, who need it, would survive without ECMO treatment.

Since there are no ECMO machines in Puerto Rico, one of the doctor's colleagues suggested the Wilford Hall Medical Center's ECMO team. Among all ECMO teams around the globe, the Wilford Hall team is unique.

"We remain the only institution or team in the world with the capability to do ECMO -- transportable ECMO -- with the geographical distribution that we can do," Major Tyree said. "In short, we are the only worldwide ECMO team."

After evaluating Stuart's condition over the phone and determining he was a good candidate, the emergency response Airmen answered one of the Parkers' prayers.

They would arrive within the next 24 hours.

The team arrived in a C-17 Globemaster III at 3:07 a.m. on July 21 at Mu Air National Guard Base, Puerto Rico. Stuart was now 85 hours and 21 minutes old.

Wilford Hall ECMO experts began evaluating the young patient and consulting with the Parkers. They began by observing Stuart's condition and preparing for the ECMO procedure, if necessary.

"I knew they were coming but I didn't expect so many of them," said Lorena Malarat, a respiratory therapist at the Hospital Auxilio Mutuo. The Lackland AFB team always travels with extra people to fill every position on the team -- just in case. "I think it is great so many people getting together for the welfare of a baby.

"Our world sees the military and they see war," she said. "But our military is not all about war, it is about helping people. I wish more people could see things like this -- see them saving a child."

After a few hours, Stuart's condition led the doctors to determine that use of the ECMO unit was best. At 3:40 p.m., Lt. Col. (Dr.) Christopher Coppola, an ECMO surgeon, made the first incision in preparation for transferring Stuart to the mechanical ventilator.

After he was stabilized and moved to the ECMO cart, a whirlwind of plans had to be completed before leaving for San Antonio.

"We are just blessed," Stephanie said. "It is a major miracle that he is even alive. We are just saying our prayers that everything will go well on the flight back to San Antonio."

At about 7:30 p.m. Stuart Parker and the ECMO team left Puerto Rico.

Despite most of the ECMO team working without sleep for more than 30 hours, it maintained a constant vigil over Stuart and the life-giving machines keeping him stable.

"It is blowing me away," Lieutenant Parker said. "My particular job in the Coast Guard is a search and rescue controller -- being on the other end of the stick and providing assistance and rescue where needed to people in life-threatening events. To be on the receiving end, particularly from another branch like the Air Force, is truly amazing. I can't be thankful enough. My family is very grateful and indebted to the Air Force.

"I am very thankful and grateful that as a joint force, we look after one another," he said.

The Parkers watched as the Airmen loaded Stuart into an ambulance headed for the Wilford Hall NICU, where he continues to improve each day.

"He is truly a miracle son. Hopefully one day we'll be able to make him proud to say that the military saved his life," Lieutenant Parker said. "I owe it to the fellow men and women in the military -- they have truly made me proud to be a member of this joint force."

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